XIPHIAS PLATYPTERUS SHAW & NODDER, 1792 (PISCES): APPLICATION TO VALIDATE THIS NOMEN OBLITUM FOR THE INDIAN OCEAN SAILFISH (GENUS ISTIOPHORUS). Z.N.(S.) 1657

By P. J. P. Whitehead (British Museum (Natural History), London)

1. In the most recent review of the Indian Ocean scombroid fishes (Jones & Silas, 1964, Scombroid Symposium, pt. I, Mar. biol. Assn. India, Mandapam Camp: 1–105), a single species of sailfish is recognized from this region. The name Scomber gladius Broussonet, 1786, has generally been cited as the earliest name for this species, but a few authors have realized that it was not Broussonet but Bloch (1793, Nat. Ausl. Fische, 7:81, pl. 345) who first used this name (e.g. Sherborn, 1902, Index Animalium: 423; Fowler, 1928, Mem. Bernice P. Bishop Mus., 10:136). But Bloch's description and figure are poor and could apply to one of several species of sailfish. However, Xiphias platypterus Shaw & Nodder, 1792 (Naturalist's Miscellany, No. 28: no pagination, pl. 88) is an accurate description of an Indian Ocean sailfish and is based on an extant specimen. The name would replace that of Bloch, but it is a nomen oblitum under Article 23 (b) (i and ii).

The purpose of this application is to request validation of *Xiphias platypterus* Shaw & Nodder by its addition to the Official List of Specific Names in Zoology.

2. Broussonet (1786, Mém. Acad. Sci. (1786): 450-455, fig. 10.) described a sailfish, 7 feet 6 inches in length, collected by Sir Joseph Banks from "les mers des grandes Indes" and deposited in the British Museum. Broussonet used no Latin binomen, but referred to the fish by the French vernacular name Voilier. He distinguished the fish from other members of the genus Scomber, suggested that it was generically distinct but proposed no alternative generic name. Bloch (loc. cit.), Lacépède (1801, Hist. Nat. Poiss., 3: 375) and Cuvier & Valenciennes (1832, Hist. Nat. Poiss., 8: 293) refer to Broussonet's description, but attribute to him no Latin binomen.

However, Günther (1860, Cat. Fish. Brit. Mus., 2:513), after listing certain pre-Linnaean references to sailfishes, cites in his synonymy for Histiophorus gladius the name "Scomber gladius, Brouss. Mém. Acad. Sc. 1786, p. 454, pl. 10; Bl. taf. 345 (bad)." Subsequent authors evidently assumed Broussonet's authorship of the name Scomber gladius as a result of a strict reading of Günther's synonymy; whereas Günther may have intended merely to reinforce Bloch's poor figure with Broussonet's good description, without meaning to imply that the name was not Bloch's.

3. The name Scomber gladius was first used by Bloch (loc. cit.). This description was not based on actual specimens and it refers to fishes from both the Atlantic and the Indo-Pacific (i.e. to at least two species of sailfish according to modern authors). Bloch cites, and criticizes, Broussonet's description and figure, mentions a drawing by Banks of a Sumatran specimen of 9 feet, but nowhere indicates that either his own drawing or description refer to an Indian Ocean species. Bloch's figure shows a fish with a single keel on the caudal peduncle (as in the swordfish, Xiphias gladius L.; two in Istiophorus).

- 4. Xiphias platypterus Shaw & Nodder, 1792, was based on a specimen collected by Banks and deposited in the British Museum—undoubtedly the same fish on which Broussonet based his description. The figure and the specimen agree in having the following combination of characters diagnostic of the genus Istiophorus:
 - (a) two keels on the caudal peduncle
 - (b) two separate and long pelvic rays
 - (c) a sail-like dorsal fin which is higher than body depth throughout its length (except for 4-5 short posterior rays)
 - (d) a long spear, rounded not flattened in cross-section.

The specimen (Reg. No. B.M.N.H. 1964. 7.2.1) has small, embedded scales, but these were evidently overlooked by Shaw ("skin smooth, without apparent scales"). This fish was fully described (but not figured) by Norman (1929, *J. mar. biol. Assn.* 16 (1): 67-71). A photograph is here reproduced as Pl. 5.

Most authors have overlooked the first description of X. platypterus, and have attributed the name to Shaw, 1803 (General Zoology 4 (1): 101, fig. 15), often placing it in the synonymy of the swordfish, X. gladius L. For these reasons, the priority of this name over Scomber gladius Bloch has not been realized. The species name platypterus has not appeared as a senior synonym since Shaw, 1803.

- 5. Lacépède (loc. cit.) proposed the genus Istiophorus, and included in it a single species, I. gladifer (it is not clear why Lacépède chose to ignore Bloch's name gladius and to latinize the vernacular name porte glaive). Jordan (1917, Genera of Fishes, Pt. 1:62) designated "Scomber gladius Broussonet" typespecies of the genus Istiophorus. This was a correct designation, in spite of the error in attribution of authorship of the name (Article 67 (g)). The rules imply that this designation could therefore stand provided that Bloch, not Broussonet, is accorded authorship of the name. This, however, would greatly alter the meaning of Jordan's designation. Thus, Scomber gladius Bloch refers to an Atlantic or to an Indo-Pacific species, the type of which is an indifferent figure in which are combined features of both the sailfish and the swordfish. Since Jordan's designation related to a single species based on a named and extant specimen, the sense of his designation is best preserved by allowing it to continue to rest on the Banksian specimen examined by Broussonet. This is possible if Xiphias platypterus Shaw and Nodder is designated type-species of Istiophorus.
- 6. In order to avoid further instability in the nomenclature, especially in view of the unsatisfactory nature of Bloch's description of *Scomber gladius*, it is proposed that the International Commission for Zoological Nomenclature should:
 - (1) use its plenary powers to set aside all designations of type-species for *Istiophorus* Lacépède, 1801, and having done so to designate *Xiphias platypterus* Shaw & Nodder, 1792 as type of that genus;
 - (2) place the generic name Istiophorus Lacépède, 1801 (gender: masculine), type-species, by designation under the plenary powers in (1) above, Xiphias platypterus Shaw & Nodder, 1792, on the Official List of Generic Names in Zoology;

(3) to place the specific name platypterus Shaw & Nodder, 1792, as published in the binomen Xiphias platypterus (type-species of Istiophorus Lacépède, 1801) on the Official List of Specific Names in Zoology;

(4) to place the specific name gladius as attributed erroneously to Broussonet, 1786, in the supposed binomen Scomber gladius on the Official Index of Rejected and Invalid Specific Names in Zoology.

